



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/561,581

12/19/2005

Manuel Gaudon

355901-1860

6470

38706

7590

02/12/2010

FOLEY & LARDNER LLP  
975 PAGE MILL ROAD  
PALO ALTO, CA 94304

EXAMINER

EMPIE, NATHAN H

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

02/12/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/561,581</p>	<p><b>Applicant(s)</b> GAUDON ET AL.</p>	
	<p><b>Examiner</b> NATHAN H. EMPIE</p>	<p><b>Art Unit</b> 1792</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 29 January 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 29 January 2010. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-28.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Michael Cleveland/  
Supervisory Patent Examiner, Art Unit 1792

/N. H. E./  
Examiner, Art Unit 1792

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's amendment of claim 23 filed 1/29/10 has been fully considered and is persuasive with respect to the 35 USC 112 1st paragraph rejection of claim 23. The 35 USC 112 2nd paragraph rejection of claim 23 has been withdrawn.

Applicant's arguments with respect to the 35 USC 103 (a) rejections over the cited prior art filed 1/29/10 have been fully considered but they are not persuasive.

1.: Applicant argues that "the prior art does not teach a polymer solution" (pg 8-9) and "Bitterlich et al. does not teach the use of a polymer solution in preparing a metal oxide layer on a substrate" (pg 11 of remarks). In response the examiner directs the applicant's attention to applicant's own specification (see, for example, pg 13 line 30 - pg 15 line 8) it would appear that a sol is considered as a "solution". The examiner asserts that a sol is well known in the art as a liquid colloidal dispersion. Further by applicant's omission "the term 'sol', when used in the context of organic chemistry can refer to a solution." (pg 10 of remarks). According to Bitterlich: "The emulsion binders, which are colloidal dispersions of a polymer in water..." (pg 675 1st paragraph). As the applicant's own invention encompasses polymeric sols as solutions, and as the Applicant has agreed that sol can refer to a solution, the prior art should be privy to just such a scope, and as such presents sufficient teaching to a medium that would be considered a solution by applicant's standards. The examiner asserts that the binders of Bitterlich are organic thus would fall within the context of organic chemistry so they would too satisfy the limitation to a solution.

Additionally, the examiner had previously cited prior art references Graham et al (US 2005/010697): "The term 'solution', as defined herein is understood to include liquids systems, gaseous systems, gels, suspensions, colloids, slurries, emulsions, and the like, and mixtures of any two or more or the foregoing" ([0038]); and Scholtz et al. (US patent 5,723,174) "The term 'solution' as used herein includes dispersion or suspensions of finely divided inorganic metal oxide particles in a liquid medium" (col 5 lines 14 - 16); to further support that the art has recognized emulsions, and colloidal dispersions as solutions; and therefore the cited prior art has sufficiently taught polymer solutions.

2: The Applicant argues that the prior art does not teach that the sequence of adding the dispersant and the polymer is critical. The examiner agrees with the applicant that the role of wet milling is to break down agglomerates, however, as explicitly taught by Mukherjee "The role of the dispersant is to keep these primary particles separated from each other thereby preventing their agglomeration due to van der Waals attraction energy" (pg 733). Without the dispersant added prior to binder and polymer additions the examiner asserts that re-agglomeration would occur and maintains that in the presence of the polymer and binders (and without dispersant) competitive adsorption would occur. Therefore the sequence of adding the dispersant and polymer is critical, as taught by the prior art. As to the dependent claims, they remain rejected as no separate arguments are provided.

The examiner maintains the 35 USC 103 (a) rejections of 7/31/09.